

In the Claims:

1-24 (cancelled)

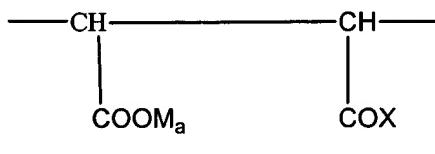
25. (New) An aqueous pigment concentrate which comprises

-- a pigment;

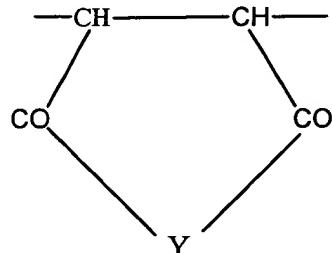
-- a copolymer based on oxyalkylenealkylglycol-alkylene ethers or polyoxyalkylene  
oxide alkenyl ethers and unsaturated dicarboxylic acid derivative comprising

a) from about 10 to about 90 mol% of structural groups of the formula Ia

and/or Ib



Ia



Ib

where

M = hydrogen, monovalent or divalent metal cation, ammonium ion, or  
an organic amine radical;

a = 1 or, if M is a divalent metal cation, is ½;

X = -OM<sub>a</sub>;

-O-(C<sub>m</sub>H<sub>l+m</sub>O)<sub>n</sub>—(C<sub>m</sub>H<sub>l+m</sub>O)<sub>o</sub>-R<sup>1</sup>;

where

$R^1$  = is H, an aliphatic hydrocarbon radical, a cycloaliphatic hydrocarbon radical, or an aryl radical, which is unsubstituted or substituted;

$l =$  1 or 2,

$m =$  2 to 18,

the index on the hydrogen atom being formed by the product of  $l$  and  $m$ ,

$n =$  0 to 100, and

$o =$  0 to 100;

$-NHR^2$ ;

$-NR^2_2$ ;

where in the last two radicals  $R^2$  is  $R^1$  or  $-CO-NH_2$  ; or

$-Q^1N - Q^2 - NQ^3Q^4$ ,

where

$Q^1$  is a hydrogen atom or a monovalent hydrocarbon radical,

$Q^2$  is a divalent alkylene radical, and

$Q^3$  and  $Q^4$  are aliphatic and/or alicyclic alkyl radicals,

and are unoxidized or oxidized to  $-Q^1N-Q^2-N^{(+)}O^{(-)}Q^3Q^4$ ,

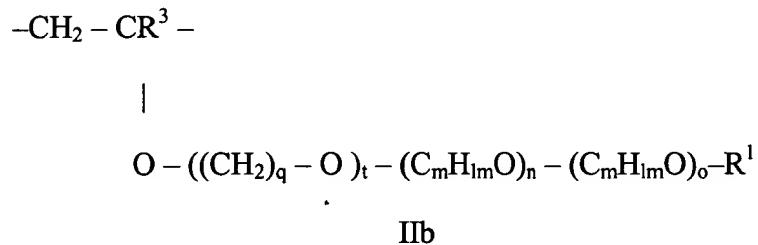
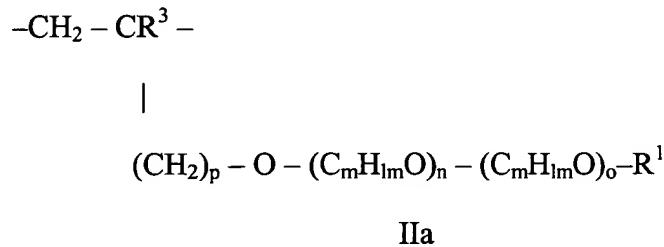
$Y = O, NR^2$ , or  $N-Q^2-NQ^3Q^4$ ,

where

$R^2$  being as defined above, and

$Q^2, Q^3$  and  $Q^4$  being as defined above,

b) from about 1 to about 89 mol% of structural groups of the formula IIa or  
IIb



in which

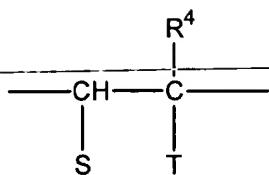
$R^3 = H$  or an aliphatic hydrocarbon radical,

$p = 0$  to 3,

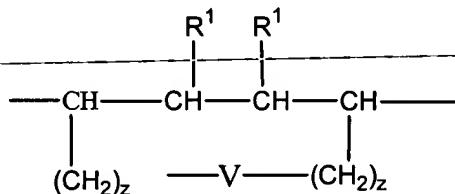
$q = 0$  to 6,

$t = 0$  to 3, and

c) about 0.1 to about 10 mol% structural groups of the formula IIIa or IIIb



IIIa



IIIb

where

$R^4 = H$  or  $CH_3$ ;

$S = H, -COOM_a$ , or  $-COOR^5$ ;

where

$R^5 =$  aliphatic hydrocarbon radical, cycloaliphatic hydrocarbon radical, or aryl radical;

$T = -U^1-O-(C_mH_{lm}O_m)_n-(C_mH_{lm}O)_o-R^6$

where

$l = 1$  or 2,

$m = 2$  to 18,

$n = 0$  to 100, and

$o = 0$  to 100;

$U^1 = -CO - NH-, -O-,$  or  $-CH_2O-,$

$R^6 = R^1;$

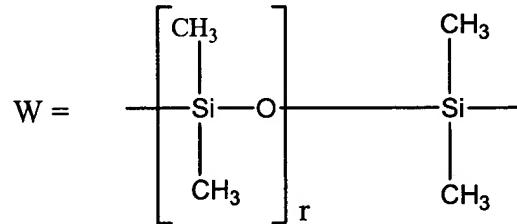
$-CH_2 - CH - U^2 - C = CH$

$R^4 \quad R^4 \quad S$

where

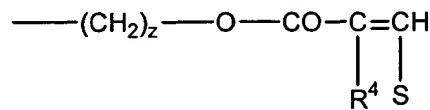
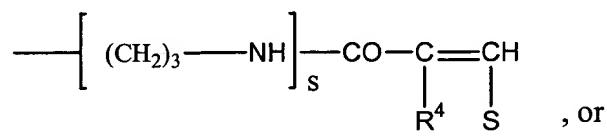
$U^2 = -NH - CO-, -O-, OCH_2,$  or  $-W - R^7,$

where



$r = 2$  to 100, and

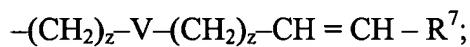
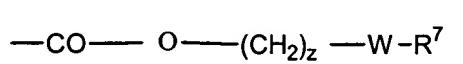
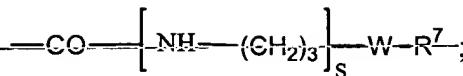
$R^7 = R^1,$



where

s = 1 or 2

z = 0 to 4;



where, in the last three radicals,

$\text{V} = \text{---O---CO---C}_6\text{H}_4\text{---CO---O---}$ , or  $\text{---W---}$ ; or

$\text{---COOR}^5$ , in the case where S is  $\text{---COOR}^5$  or  $\text{COOM}_a$ ;

- water;
- optionally a co-solvent;

and

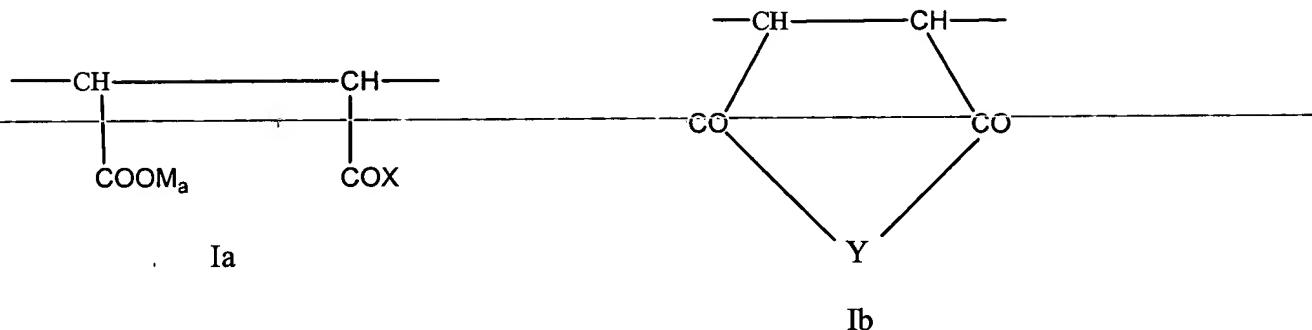
- optionally an auxiliary.

26. (New) The aqueous pigment concentrate according to claim 25, wherein a co-solvent is present and it is a glycol ester or a glycol ether.

27. (New) An aqueous pigment concentrate which comprises

- a pigment;
- a copolymer based on oxyalkylenealkylglycol-alkylene ethers or polyoxyalkylene oxide alkenyl ethers and unsaturated dicarboxylic acid derivative comprising

a) from 10 to 90 mol% of structural groups of the formula Ia  
and/or Ib



where

$M =$  hydrogen, monovalent or divalent metal cation, ammonium ion, or  
an organic amine radical;

$a =$  1 or, if  $M$  is a divalent metal cation, is  $\frac{1}{2}$ ;

$X = -OM_a ;$

$-O-(C_mH_{lm}O)_n-(C_mH_{lm}O)_o-R^1;$

where

$R^1 =$  is H, an aliphatic hydrocarbon radical, a  
cycloaliphatic hydrocarbon radical, or an aryl  
radical, which is unsubstituted or substituted;

$l =$  1 or 2,

$m =$  2 to 18,

the index on the hydrogen atom being formed by  
the product of l and m,

n = 0 to 100, and

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o = 0 to 100;

-NHR<sup>2</sup>;

-NR<sup>2</sup><sub>2</sub>;

where in the last two radicals R<sup>2</sup> is R<sup>1</sup> or -CO-NH<sub>2</sub>; or

-Q<sup>1</sup>N-Q<sup>2</sup>-NQ<sup>3</sup>Q<sup>4</sup>,

where

Q<sup>1</sup> is a hydrogen atom or a monovalent hydrocarbon  
radical,

Q<sup>2</sup> is a divalent alkylene radical, and

Q<sup>3</sup> and Q<sup>4</sup> are aliphatic and/or alicyclic alkyl radicals,

and are unoxidized or oxidized to -Q<sup>1</sup>N-Q<sup>2</sup>-N<sup>(+)</sup>O<sup>(-)</sup>Q<sup>3</sup>Q<sup>4</sup>,

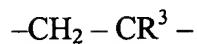
Y= O, NR<sup>2</sup>, or N-Q<sup>2</sup>-NQ<sup>3</sup>Q<sup>4</sup>,

where

R<sup>2</sup> being as defined above, and

$Q^2$ ,  $Q^3$  and  $Q^4$  being as defined above,

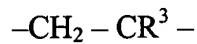
b) from 1 to 89 mol% of structural groups of the formula IIa or IIb



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IIa



|



IIb

in which

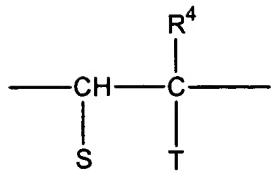
$\text{R}^3$  = H or an aliphatic hydrocarbon radical,

$p$  = 0 to 3,

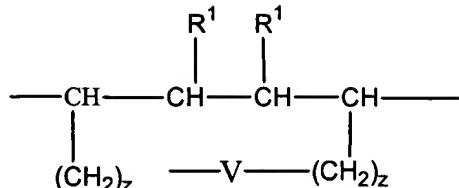
$q$  = 0 to 6,

$t$  = 0 to 3, and

c) about 0.1 to about 10 mol% structural groups of the formula IIIa or IIIb



IIIa



IIIb

where

$\text{R}^4 = \text{H or CH}_3$ ;

$\text{S} = \text{H, } -\text{COOM}_a \text{, or } -\text{COOR}^5$ ;

where

$\text{R}^5 = \text{aliphatic hydrocarbon radical, cycloaliphatic}$   
 $\text{hydrocarbon radical, or aryl radical;}$

$\text{T} = -\text{U}^1-\text{O}-(\text{C}_m\text{H}_{lm}\text{O}_m)_n-(\text{C}_m\text{H}_{lm}\text{O})_o-\text{R}^6$

where

$l = 1 \text{ or } 2$ ,

$m = 2 \text{ to } 18$ ,

$n = 0 \text{ to } 100$ , and

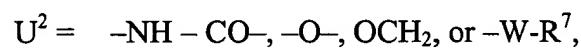
$o = 0 \text{ to } 100$ ;

$\text{U}^1 = -\text{CO}-\text{NH}-, -\text{O}-, \text{ or } -\text{CH}_2\text{O}-$ ,

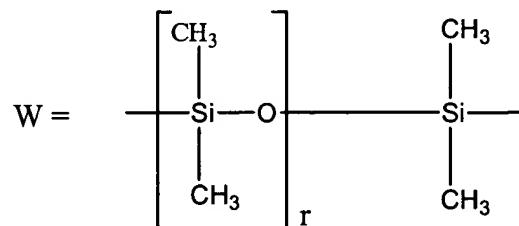
$\text{R}^6 = \text{R}^1$ ;



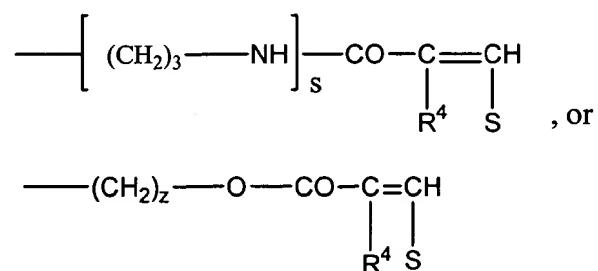
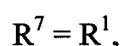
where



where



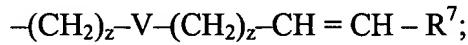
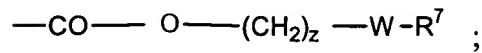
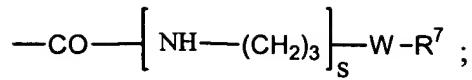
$r = 2$  to 100, and



where

$s = 1$  or 2

$z = 0$  to 4;



where, in the last three radicals,

$\text{V} = -\text{O}-\text{CO}-\text{C}_6\text{H}_4-\text{CO}-\text{O}-$ , or  $-\text{W}-$ ; or

$-\text{COOR}^5$ , in the case where  $\text{S}$  is  $-\text{COOR}^5$  or  $\text{COOM}_a$ ;

-- water;

-- optionally a co-solvent;

and

-- optionally an auxiliary.

28. (New) The aqueous pigment concentrate according to claim 25, where the pigment is an inorganic pigment.

29. (New) The aqueous pigment concentrate according to claim 28, wherein the pigment is an iron oxide.

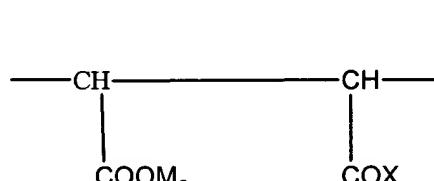
30. (New) The aqueous pigment concentrate according to claim 28, wherein the pigment is a transparent iron oxide.

31. (New) A coating system which comprises an aqueous pigment concentrate according to claim 25 and an aqueous coating material.

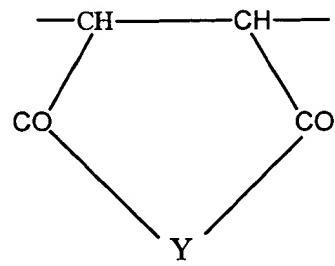
32. (New) The coating system according to claim 31, wherein the coating material is a one-component coating material which is based on alkyl, acrylate, epoxy, polyvinyl acetate, polyester, or polyurethane resins.

33. (New) The coating system according to claim 31, wherein the coating material is a two-component coating material based on hydroxyl-containing polyacrylate or polyester resins with melamine resins or optionally blocked polyisocyanate resins as cross linkers, or polyepoxide resins.

34. (New) An aqueous pigment concentrate comprising  
-- a pigment;  
-- a copolymer based on oxyalkylenealkylglycol-alkylene ethers or polyoxyalkylene oxide alkenyl ethers and unsaturated dicarboxylic acid derivative comprising  
a) from about 10 to about 90 mol% of structural groups of the formula Ia  
and/or Ib



Ia



Ib

where

M = hydrogen, monovalent or divalent metal cation, ammonium ion, or an organic amine radical;

a = 1 or, if M is a divalent metal cation, is  $\frac{1}{2}$ ;

X = -OM<sub>a</sub>;

-O-(C<sub>m</sub>H<sub>l</sub>mO)<sub>n</sub>—(C<sub>m</sub>H<sub>l</sub>mO)<sub>o</sub>-R<sup>1</sup>;

where

R<sup>1</sup> = is H, an aliphatic hydrocarbon radical, a cycloaliphatic hydrocarbon radical, or an aryl radical, which is unsubstituted or substituted;

l = 1 or 2,

m = 2 to 18,

the index on the hydrogen atom being formed by the product of l and m,

n = 0 to 100, and

o = 0 to 100;

-NHR<sup>2</sup>;

-NR<sup>2</sup><sub>2</sub>;

where in the last two radicals R<sup>2</sup> is R<sup>1</sup> or -CO-NH<sub>2</sub>; or -Q<sup>1</sup>N-Q<sup>2</sup>-NQ<sup>3</sup>Q<sup>4</sup>,

where

$Q^1$  is a hydrogen atom or a monovalent hydrocarbon radical,

$Q^2$  is a divalent alkylene radical, and

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$Q^3$  and  $Q^4$  are aliphatic and/or alicyclic alkyl radicals,

and are unoxidized or oxidized to  $-Q^1N-Q^2-N^{(+)}O^{(-)}Q^3Q^4$ ,

$Y = O, NR^2$ , or  $N-Q^2-NQ^3Q^4$ ,

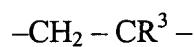
where

$R^2$  being as defined above, and

$Q^2, Q^3$  and  $Q^4$  being as defined above,

b) from about 1 to about 89 mol% of structural groups of the formula IIa or

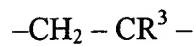
IIb



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IIa



|



IIb

in which

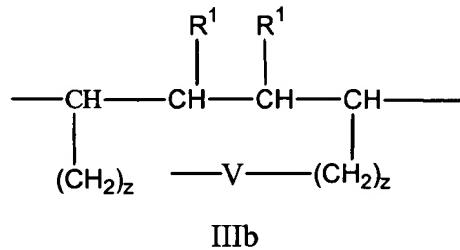
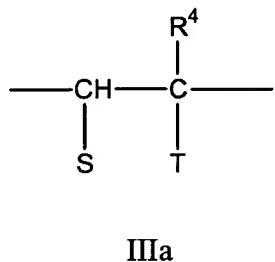
$R^3$  = H or an aliphatic hydrocarbon radical,

$p$  = 0 to 3,

$q$  = 0 to 6,

$t$  = 0 to 3, and

c) about 0.1 to about 10 mol% structural groups of the formula IIIa or IIIb



where

$R^4$  = H or  $CH_3$ ;

$S$  = H,  $-COOM_a$ , or  $-COOR^5$ ;

where

$R^5$  = aliphatic hydrocarbon radical, cycloaliphatic hydrocarbon radical, or aryl radical;

$T$  =  $-U^1-O-(C_mH_{lm}O_m)_n-(C_mH_{lm}O)_o-R^6$

where

1 = 1 or 2,

m = 2 to 18,

n = 0 to 100, and

---

o = 0 to 100;

$U^1 = -CO - NH-, -O-,$  or  $-CH_2O-,$

$R^6 = R^1;$

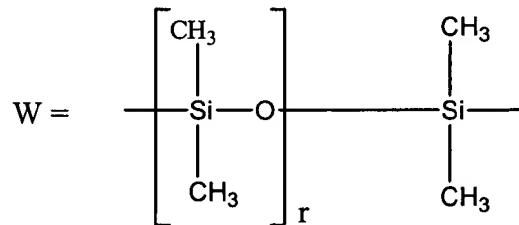
$-CH_2 - CH - U^2 - C = CH$



where

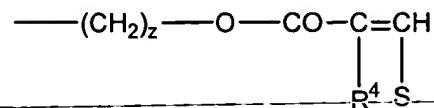
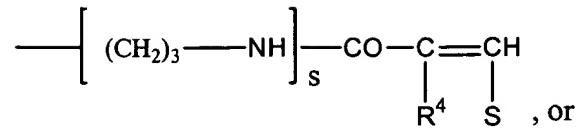
$U^2 = -NH - CO-, -O-, OCH_2,$  or  $-W - R^7,$

where



$r = 2$  to 100, and

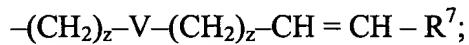
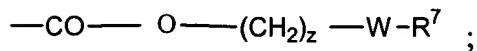
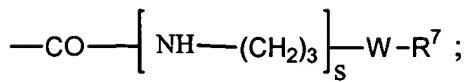
$R^7 = R^1,$



where

$s = 1 \text{ or } 2$

$z = 0 \text{ to } 4;$



where, in the last three radicals,

$V = \text{---O---CO---C}_6\text{H}_4\text{---CO---O---, or ---W---; or}$

$\text{---COOR}^5, \text{ in the case where S is ---COOR}^5 \text{ or COOM}_a;$

wherein the polymerization occurs in aqueous solution at a temperature of from about 20 to about 100°C in the presence of a free-radical initiator

-- water;

-- optionally a co-solvent;

and

-- optionally an auxiliary.